

NHS smoking cessation services appear to be doing better than might be expected. A range of approaches is being employed to target disadvantaged smokers, including basing smoking cessation advisers in primary care venues in deprived areas, advertising the service in these areas, using a range of community venues such as libraries and community centres and training local people from poorer neighbourhoods to be smoking cessation advisers. Perhaps more importantly, however, services were asked by the Department of Health from the very beginning to reach disadvantaged smokers, and service coordinators accepted from the beginning that this was an important goal. The impact of this success in reaching disadvantaged smokers may be mitigated, however, by their lower success rate. For the services to have an impact in reducing inequalities they will probably need to improve cessation rates in disadvantaged smokers.

Outcome

The validated 1-year abstinence rate of 15% is consistent with results from clinical trials [9,18–21] and the week 4 to week 52 relapse rate of 75% is also consistent with published studies [22]. Thus there is a strong case for relying on research data to extrapolate from short- to long-term outcome and not asking the treatment services to collect long-term follow-up data, which can be expensive and time-consuming and distract the services from treating smokers. Our recommendation is that centrally funded research should periodically investigate long-term outcome in selected services. This will be especially important in seeing if these treatment services can achieve good cessation rates with disadvantaged smokers. We believe services should collect CO validated 4 week quit rates routinely, as these are a good indicator of longer-term outcomes. Were this recommendation to be accepted then CO testing at 4 weeks would have to be mandatory and self-reported smokers whose smoking status is not validated would have to be recorded as smoking. It cannot be conducted on a voluntary basis: biases would creep into the data whereby services that were more conscientious and devoted more effort to rigorous validation might consequently be, or appear to be, less successful.

Cost-effectiveness

The cost-effectiveness results confirm that treating dependent smokers is extremely cost-effective and represents excellent value for money compared with many other health care interventions. In fact it is one of the most cost-effective of *any* intervention provided by the English health care system and, on these figures, by a long way. These services are treating smokers more than

10 times more cost-effectively than the informal benchmark of £20 000 per quality adjusted life-year saved, which the English agency National Institute for Clinical Excellence (NICE) has been using to approve new health care interventions [23]. The figure from the government monitoring data of an average cost per treated smoker of around £200 also shows that helping smokers stop is a remarkably low-cost intervention [24]. Thus treatment for dependent smokers is excellent value for health care systems and, we suggest, should be introduced into all national health care systems.

LESSONS

To what extent can this English experience be reproduced in other countries or regions and organizations? It occurred within a tradition of relatively well-funded addictions research and health education, the active support of many campaigning and professional organizations over more than 30 years, governments which accepted the desirability of combating tobacco, the existence of a national health service with a well-developed infrastructure [1] and in a wealthy country.

From a historical perspective the role of the medical profession was critical in developing tobacco control policy generally and in supporting treatment [1]. The lesson to smoking cessation specialists and tobacco control advocates is: work and campaign with doctors at as high a level as possible. If they need educating first then do that first, because in many countries the medical profession is extremely influential. The national treatment guidelines published by the Health Education Authority in 1998 were not only evidence-based but were also formally endorsed by more than 20 professional organizations, including medical, nursing, dental and pharmacy bodies. This enhanced the authority and influence of the guidelines and helped put evidence-based treatment into the government White Paper.

The effectiveness and cost-effectiveness evidence was also influential and the real-life results from this evaluation back up that research evidence [13]. Treating dependent smokers is one of the most cost-effective interventions that a health service can deliver [8,13]. If health care systems offer these services they will eventually release resources (no longer needed to treat lung cancer, for example) for other uses.

In spite of the excellent cost-effectiveness research evidence, when the government were developing plans for these treatment services the finance ministry insisted on careful estimates of how much the services would cost and on good monitoring data, so that they would know how effective the services were. Thus it may be worth pointing out to governments how cheap smoking

treatment services are (for example they do not require expensive high-tech equipment).

Securing adequate funding for smoking treatment services will always be difficult because health care spending tends to be driven by treating illness, so the effectiveness and cost-effectiveness evidence will be crucial in persuading governments of their value. In England, smoking costs the health service about £1500 million each year [13]. The smoking treatment services are costing approximately £50–55 million a year including medications [1]. Funding smoking treatment services will have a knock-on effect and reduce other health care expenditure. Thus the lesson is: present the evidence and arguments until they are accepted. The English experience suggests that this can be achieved, although we believe that the English experience depended critically on key people being in the right place at the right time. Initiatives such as this will usually need champions.

Government commitment is necessary to develop a treatment system nationally. In England this took from 15 to 36 years, depending on when the clock started. It was 36 years from publication of the first Royal College of Physicians report on smoking and health [25] until the launch of these services, and 15 years from a report published by the Health Education Council, which surveyed the provision of treatment to help smokers stop and called for a comprehensive national treatment system [26]. It need not take so long in other countries. Much of the evidence and arguments are now available (for example, see *The case for commissioning smoking cessation services* [27]) and we hope this *Addiction* supplement will help.

Recommendations

- 1 *Lead time*: allow from 6 to 12 months to plan and launch the services;
- 2 *Training*: set national training standards and increase capacity *before* launching the services;
- 3 *Medications*: standardize the provision of pharmaceutical treatments and make them as widely available and accessible as possible (this includes make them *affordable*) *before* launching the services;
- 4 *Initial funding*: give the services *five years* to become well established;
- 5 *Monitoring*: monitoring is extremely important but it should not be so much of a burden that it detracts from developing a quality service; 4-week validated success rates should be monitored by the treatment services; however, we think that monitoring of 1-year success rates should not be conducted routinely by all by the services; it should be conducted on a subsample of service clients through a central research body;

6 *Targets*: targets for smokers stopping through the services can be helpful in ensuring that they are prioritized in the health care system; however, care needs to be taken that they are reasonable; if reaching key groups, such as deprived smokers, is a priority then targets should be set and monitored formally for this, and these targets should not conflict with throughput targets; targets must not be so demanding that they produce target-meeting-behaviour or cheating rather than real improvements in health outcomes; and

7 *Give guidance on service development*: the Department of Health gave guidance on various aspects of service development; this guidance was successful and, *inter alia*, encouraged services to keep to evidence-based treatment.

As we go to press, the services are in their sixth year and their second year without central 'dedicated' funding. Further research will be needed to establish if they can survive in their new 'unprotected' environment. The government controls that helped maintain quality standards are now weaker and it is not yet clear if the more demanding targets will produce better performance or simply target meeting behaviour. Nevertheless, we believe the lessons from this English experience will be useful to others and that evidence-based treatment for dependent smokers will become a normal part of all health care systems.

Acknowledgements

This research was funded by the Department of Health's Policy Research Programme to whom we are grateful. However the views expressed are those of the authors. We thank Linda Bauld, Ken Judge and Robert West for helpful feedback on early drafts of this paper.

References

1. McNeill, A., Raw, M., Whybrow, J. & Bailey, P. (2005) A national strategy for smoking cessation treatment in England. *Addiction*, 100 (Suppl. 2), 1–11.
2. Coleman, T., Pound, E., Adams, C., Bauld, L., Ferguson, J. & Cheater, F. (2005) Implementing a national treatment service for dependant smokers: initial challenges and solutions. *Addiction*, 100 (Suppl. 2), 12–18.
3. Bauld, L., Coleman, T., Adams, C., Pound, E. & Ferguson, J. (2005) Delivering the English smoking treatment services. *Addiction*, 100 (Suppl. 2), 19–27.
4. Pound, E., Coleman, T., Adams, C., Bauld, L. & Ferguson, J. (2005) Targeting smokers in priority groups: the influence of government targets and policy statements. *Addiction*, 100 (Suppl. 2), 28–35.
5. Chesterman, J., Judge, K., Bauld, L. & Ferguson, J. (2005) How effective are the English smoking treatment services in reaching disadvantaged smokers? *Addiction*, 100 (Suppl. 2), 36–45.

6. Judge, K., Bauld, L., Chesterman, J. & Ferguson, J. (2005) The English smoking treatment services: short-term outcomes. *Addiction*, 100 (Suppl. 2), 46–58.
7. Ferguson, J., Bauld, L., Chesterman, J. & Judge, K. (2005) The English smoking treatment services: one-year outcomes. *Addiction*, 100 (Suppl. 2), 59–69.
8. Godfrey, C., Parrott, S., Coleman, T. & Pound, E. (2005) The cost-effectiveness of the English smoking treatment services: evidence from practice. *Addiction*, 100 (Suppl. 2), 70–83.
9. Raw, M., McNeill, A. & West, R. (1998) Smoking cessation guidelines for health professionals. *Thorax*, 53 (Suppl. 5, Part 1), S1–S17. Available at: <http://www.nelh.nhs.uk/guidelinesdb/html/Smoking-ft.htm>.
10. Action on Smoking and Health (ASH) (2003) *ASH response to Securing Good Health for the Whole Population*. London: ASH. Available at: <http://www.ash.org.uk>.
11. West, R., McNeill, A. & Raw, M. (2004) *Smoking Cessation Guidelines for Scotland: 2004 update*. Edinburgh: NHS Health Scotland. Available at: <http://www.healthscotland.com/tobacco>.
12. Cromwell, J., Bartosch, W. J., Fiore, M. C., Hassleblad, V. & Baker, T. (1997) Cost-effectiveness of the clinical practice recommendations in the AHCPR guideline for smoking cessation. *JAMA*, 278, 1759–1766.
13. Parrott, S., Godfrey, C., Raw, M., West, R. & McNeill, A. (1998) Guidance for commissioners on the cost effectiveness of smoking cessation interventions. *Thorax*, 53 (Suppl. 5, Part 2), S1–S38. Available at: <http://www.nelh.nhs.uk/guidelinesdb/html/Smoking-ft.htm>.
14. Orme, M., Hogue, S. L., Kennedy, L. M., Paine, A. C. & Godfrey, C. (2001) Development of the Health and Economic Consequences of Smoking (HECOS) interactive model. *Tobacco Control*, 10, 55–61.
15. Woolacott, N. F., Jones, L., Forbes, C. A., Mather, L. C., Sowden, A. J., Song, F. J., Raftery, J. P., Aveyard, P. N., Hyde, C. J. & Barton, P. M. (2002) The clinical effectiveness and cost effectiveness of bupropion and nicotine replacement therapy for smoking cessation: a systematic review and economic evaluation. *Health Technology Assessment*, 6, 49–61.
16. Health Development Agency (2003) *Standard for training in smoking cessation treatments*. London: Health Development Agency. Available at: http://www.hda-online.org.uk/documents/smoking_cessation_treatments.pdf.
17. Bauld, L., Mackinnon, J. & Judge, K. (2002) *Community Health Initiatives: Recent Policy Developments and the Emerging Evidence Base*. Glasgow: Health Promotion Policy Unit, University of Glasgow. Available at: <http://www.detr.gov.uk>.
18. Fiore, M. C., Bailey, W. C., Cohen, S. J., Dorfman, S. F., Goldstein, M. G., Gritz, E. R., Heyman, R. B., Jaen, C. R., Kottke, T. E., Lando, H. A., Mecklenburg, R. E., Mullen, P. D., Nett, L. M., Robinson, L., Stitzer, M. L., Tommasello, A. C., Villejo, L. & Wewers, M. E. (1996) *Smoking Cessation*. Clinical Practice Guideline, no. 18, publication no. 96–0692. Rockville, MD: Agency for Health Care Policy and Research, US Department of Health and Human Services.
19. Fiore, M. C., Bailey, W. C., Cohen, S. J., Dorfman, S. F., Goldstein, M. G., Gritz, E. R., Heyman, R. B., Jaen, C. R., Kottke, T. E., Lando, H. A., Mecklenburg, R. E., Mullen, P. D., Nett, L. M., Robinson, L., Stitzer, M. L., Tommasello, A. C., Villejo, L. & Wewers, M. E. (2000) *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville: US Department of Health and Human Services.
20. West, R., McNeill, A. & Raw, M. (2000) National smoking cessation guidelines for health professionals: an update. *Thorax*, 55, 987–999. Available at: <http://www.ash.org.uk/html/cessation/servicescase.pdf>.
21. Lancaster, T., Stead, L., Silagy, C. & Sowden, A. (2000) Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library. *BMJ*, 321, 355–358.
22. Stapleton, J. (1998) Cigarette smoking prevalence, cessation and relapse. *Statistical Methods in Medical Research*, 7, 187–203.
23. National Institute for Clinical Excellence (NICE) (2004) *Guide to the Methods of Technology Appraisal*. London: National Institute for Clinical Excellence. Available at: http://www.nice.org.uk/pdf/TAP_Methods.pdf (para 6.2.6.10).
24. Stapleton, J. (2001) *Cost Effectiveness of NHS Smoking Cessation Services*. London: ASH. Available at: <http://www.ash.org.uk/html/cessation/ashcost.html>.
25. Royal College of Physicians (1962) *Smoking and Health*. London: Pitman Medical Publishing.
26. Raw, M. & Heller, J. (1984) *Helping People Stop Smoking: the Development, Role and Potential of Support Services in the UK*. London: Health Education Council.
27. Raw, M., McNeill, A. & Watt, J. (2001) *The Case for Commissioning Smoking Cessation Services*. London: WHO Europe Partnership Project and SmokeFree London. Available at: <http://www.ash.org.uk/html/cessation/servicescase.pdf> and <http://www.ash.org.uk/html/cessation/servicescase.html>.



Economics of smoking cessation

Steve Parrott and Christine Godfrey

BMJ 2004;328:947-949
doi:10.1136/bmj.328.7445.947

Updated information and services can be found at:
<http://bmj.com/cgi/content/full/328/7445/947>

These include:

- References** This article cites 5 articles, 2 of which can be accessed free at:
<http://bmj.com/cgi/content/full/328/7445/947#BIBL>
- 3 online articles that cite this article can be accessed at:
<http://bmj.com/cgi/content/full/328/7445/947#otherarticles>
- Rapid responses** 5 rapid responses have been posted to this article, which you can access for free at:
<http://bmj.com/cgi/content/full/328/7445/947#responses>
- You can respond to this article at:
<http://bmj.com/cgi/eletter-submit/328/7445/947>
- Email alerting service** Receive free email alerts when new articles cite this article - sign up in the box at the top right corner of the article
-

- Topic collections** Articles on similar topics can be found in the following collections
- Smoking (961 articles)
 - Health education (including prevention and promotion) (655 articles)
-

Notes

To order reprints of this article go to:
<http://www.bmjournals.com/cgi/reprintform>

To subscribe to *BMJ* go to:
<http://bmj.bmjournals.com/subscriptions/subscribe.shtml>

ABC of smoking cessation

Economics of smoking cessation

Steve Parrott, Christine Godfrey

Smoking imposes a huge economic burden on society—currently up to 15% of total healthcare costs in developed countries. Smoking cessation can save years of life, at a very low cost compared with alternative interventions. This chapter reviews some of the economic aspects of smoking cessation.

Who benefits from cessation?

The most obvious benefits of smoking cessation are improvements in life expectancy and prevention of disease. However, cessation also improves individuals' quality of life as smokers tend to have a lower self reported health status than non-smokers, and this improves after stopping smoking.

There are also wider economic benefits to individuals and society, arising from reductions in the effects of passive smoking in non-smokers and savings to the health service and the employer. These wider benefits are often omitted from economic evaluations of cessation interventions, which consequently tend to underestimate the true value for money afforded by such programmes.

Economic burden of smoking

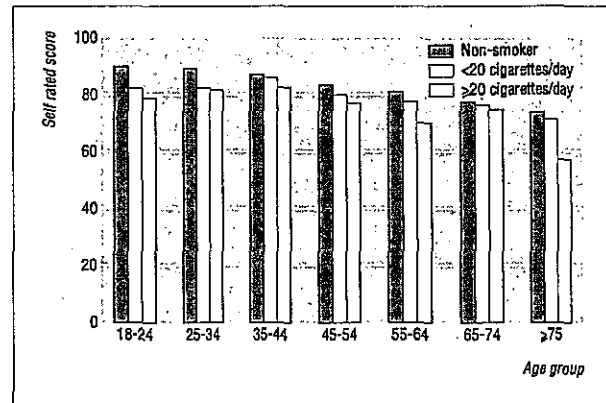
Many estimates have been made of the economic cost of smoking in terms of health resources. For the United States they typically range from about 0.6% to 0.85% of gross domestic product. In absolute terms, the US public health service estimates a total cost of \$50bn (£29bn; €42bn) a year for the treatment of smoking related diseases, in addition to an annual \$47bn in lost earnings and productivity. Estimated total costs in Australia and Canada, as a proportion of their gross domestic product, are 0.4% and 0.56% respectively. In the United Kingdom, the treatment of smoking related disease has been estimated to cost the NHS £1.4bn-£1.5bn a year (about 0.16% of the gross domestic product)—including £127m to treat lung cancer alone.

When expressed as a percentage of gross domestic product, the economic burden of smoking seems to be rising. In reality, however, the burden may not be increasing, but instead, as more diseases are known to be attributable to smoking, the burden attributed to smoking increases. Earlier estimates may simply have underestimated the true cost.

Passive smoking

In the United States, passive smoking has been estimated to be responsible for 19% of total expenditure on childhood respiratory conditions, and maternal smoking has been shown to increase healthcare expenditure by \$120 a year for children under age 5 years and \$175 for children under age 2 years.

In the United Kingdom an estimated £410m a year is spent treating childhood illness related to passive smoking; in adults, passive smoking accounts for at least 1000 deaths in non-smokers, at an estimated cost of about £12.8m a year at 2002 prices.



Self rated health status (100 = best imaginable health state), by age and smoking status. Data from Kind et al. *UK population norms for EQ-5D*. York: Centre for Health Economics (Discussion paper 172)

Benefits of smoking cessation

Smokers and their families

- Improved quality and quantity of life for those stopping smoking
- Improved quality and quantity of life for those living with smokers through a reduction in the harm from passive smoking

Society

- Lower healthcare expenditure on treatment of smoking induced disease
- Less workplace absenteeism due to smoking related disease
- Less harm from passive smoking in public places
- Reduction in costs related to cleaning up after smokers (cigarette ends, ash, etc and damage from these to floors and furnishings)



In Puerto Rico, China (above), and Venezuela, the cost of smoking has been estimated as 0.3%-0.43% of the gross domestic product

Passive smoking causes illness and premature loss of life, at all ages from the prenatal period to late adult life

Clinical review

Cost of absenteeism

Absenteeism arising from smoking related disease is also a major cause of lost productivity, a cost incurred by employers. An annual estimated 34 million days are lost in England and Wales through sickness absence resulting from smoking related illness, and in Scotland the cost of this productivity loss is about £400m.

Cost effectiveness of cessation programmes

Clear evidence exists that smoking cessation interventions are effective. However, to show value for money, the costs as well as the effectiveness of such programmes have to be examined. The overwhelming evidence is that face to face cessation interventions provide excellent value for money compared with the great majority of other medical interventions.

Several complex factors influence cost effectiveness. For example, although a cessation programme tends to be more effective as its intensity increases, increased intensity is associated with increased costs, therefore increasing both sides of the cost effectiveness ratio. This was illustrated in a study by Parrott et al (1998) of the range of intensities of smoking cessation interventions in the United Kingdom. The researchers examined these interventions using local cost data and life years saved as predicted from the PREVENT simulation model. They looked at four interventions: a basic intervention of three minutes of opportunistic brief advice; brief advice plus self help material; brief advice plus self help material and nicotine replacement products; and brief advice plus self help material, nicotine replacement products, and a recommendation to attend a smoking cessation clinic. The most cost effective intervention was the brief advice alone (cost £159 per life year saved, £248 when discounted at 6%), although the most intensive clinical interventions still represent good value for money at £1002 per life year saved when discounted at 6%.

The cost effectiveness of putting the US Agency for Healthcare Research and Quality's clinical guidelines on smoking cessation into practice has also been estimated, for combined interventions based on smokers' preferences for different types of the five basic recommended interventions. The cost of implementation was estimated at \$6.3bn in the first year, as a result of which society would gain 1.7 million new quitters at an average cost of \$3779 per quitter, \$2587 per life year saved, and \$1915 per quality adjusted life year (QALY). In this study the most intensive interventions were calculated to be more cost effective than the briefer therapies.

Care should be taken when extrapolating the results of these evaluations, as cost effectiveness estimates are likely to be time and country specific and highly dependent on the healthcare system in question. In a system of fee for service, as in the United States, monetary rewards may be necessary to encourage provision. On the other hand, if patients who stop smoking place a reduced burden on the primary care budget in future years, the incentives to provide such services may be inherent in the system.

Pharmacological interventions

The National Institute for Clinical Excellence (NICE) has recently estimated the cost effectiveness of using nicotine replacement therapy (NRT) or bupropion therapy. These estimates projected life years saved over a shorter period than the PREVENT model and hence produced generally higher figures: £1000-£2400 per life year saved for advice and NRT,

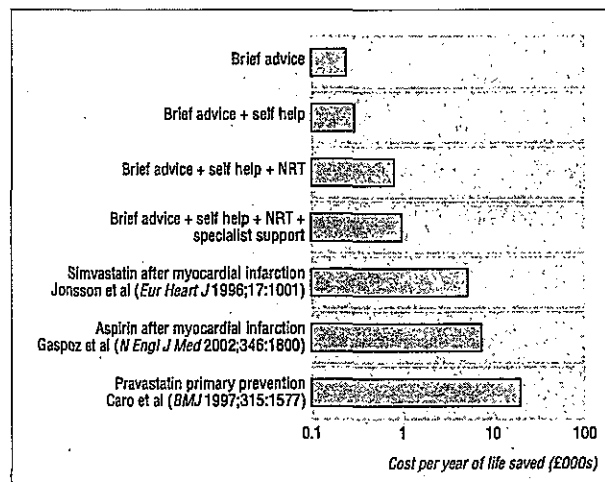
Smoking related fires cause about £151m of damage each year in England and Wales

Cost effectiveness estimates for healthcare providers

Type of intervention	Costs per life year saved (£)	
	Undiscounted	Discounted
Face to face		
Brief advice	159	248
Brief advice plus self help	195	303
Brief advice plus self help plus NRT	524	815
Brief advice plus self help plus NRT plus specialist cessation service	658	1022
Community		
"Quit and win" programme:		
Medium intensity	634	986
"No smoking" day	26	40
Broader community health promotion interventions (medium intensity)	192	295

NRT = nicotine replacement therapy. Data from Parrott et al, 1998 (see Further Reading box), revised to reflect 2001-2 prices.

Discounting is a method of adjusting for the fact that individuals prefer to incur costs in later periods and enjoy benefits in the current period. Applying a discount rate transforms future values into current values, taking this preference into account



Cost effectiveness of smoking cessation interventions compared with that of routine strategies for preventing myocardial infarction

The National Institute for Clinical Excellence is part of the NHS in England and Wales; it issues guidance on current "best practice"

£645-£1500 for advice plus bupropion, and £890-£1970 for advice, nicotine replacement, and bupropion. When QALYs are used, the ranges are £741-£1780, £473-£1100, and £660-£1460 respectively. These costs again compare favourably with a range of other healthcare interventions. Bupropion does seem more cost effective than NRT, although the evidence base for the effectiveness of bupropion is much less extensive than for NRT, and results should therefore be treated with caution.

The cost effectiveness of bupropion has been investigated in Spain with a decision model (Musin et al, eighth meeting of the Society for Research on Nicotine and Tobacco, Savannah, 2002). The model presents results in an incremental analysis over and above opportunistic advice in primary care. The findings show that if all motivated smokers in Spain were to use the therapy, over a 20 year period 44 235 smoking related deaths would be averted at a saving to the healthcare system of €1.25bn. In the United States, studies have predicted savings of between \$8.8m and \$14m over 20 years when bupropion is added to an insurance plan. In a UK study, Stapleton et al (1999) used data from a randomised placebo controlled trial of nicotine patches and a survey of resource use to show that if general practitioners were allowed to prescribe transdermal nicotine patches on the NHS for 12 weeks, the cost per life year saved would be £398 for people aged under 35, £345 for those aged 35-44, £432 for those aged 45-54, and £785 for those aged 55-65. Since Stapleton's study was published, NRT has been made available in Britain through NHS prescription. However, studies have tended to exclude potential side effects of bupropion and are again based on a more limited effectiveness database than the evidence for the effectiveness of NRT products.

The means by which the provision is financed is a crucial determinant of the effectiveness of smoking cessation products. Evidence shows that smokers are more likely to take up smoking cessation interventions if they are provided by their insurance scheme or health service than if they have to pay for them themselves. In the United Kingdom, NHS provision can reduce costs through bulk buying and discounts from pharmaceutical manufacturers. The price for a packet of seven 15 mg Nicorette patches, for example, costs £15.99 through retail outlets, compared with an NHS purchase price of only £9.07, a reduction of about 43%. It is also clear that decreases in the price of NRT products and increases in the price of cigarettes would lead to substantial increases in per capita sales of NRT products.

The photograph of the Marlboro advertisement in China is published with permission from Mark Henley/Panos.

Steve Parrott is a research fellow at the Centre for Health Economics and Christine Godfrey is professor at the Department of Health Sciences at the University of York. The ABC of smoking cessation is edited by John Britton, professor of epidemiology at the University of Nottingham in the division of epidemiology and public health at City Hospital, Nottingham. The series will be published as a book in the late spring.

Competing interests: See first article in this series (24 January 2004) for the series editor's competing interests.

BMJ 2004;328:947-9

Comparative costs of other common healthcare treatments (analysis of guidance of the National Institute for Clinical Excellence)

Intervention	Incremental cost (£)	
	Per quality adjusted life year	Per life year gained
Zanamivir in managing influenza	9300-31 500	
Taxanes for ovarian cancer		6500-10 000
Taxanes for breast cancer		7000-24 000
Implantable cardioverter defibrillators for arrhythmias		26 000-31 000
Glycoprotein IIb/IIIa inhibitors for acute coronary syndromes		7000-12 000
Methylphenidate for attention-deficit/hyperactivity disorder in children	10 000-15 000	
Tribavirin and interferon alfa for hepatitis C:		
First six months' treatment	3000-7000	
Second six months' treatment	5000-36 000	
Laparoscopic surgery for inguinal hernias	50 000	
Riluzole for motor neurone disease	34 000-43 000	
Orlistat for obesity in adults		20 000-30 000

Adapted from Raftery (BMJ 2001;323:1300-3).

Key points

- Savings to the healthcare system, a reduction in the harm caused by passive smoking, and savings to employers are all relevant in evaluations of cessation interventions
- The economic cost of smoking in the United States may be as high as 1.15% of gross domestic product in terms of healthcare costs alone
- The estimated cost to the NHS is £1.4bn-£1.5bn
- Cessation interventions offer excellent value for money when compared with some other healthcare interventions
- Some studies have quantified outcomes in life years saved, not allowing for changes in quality of life, thereby underestimating the cost effectiveness of smoking cessation by almost half

Further reading

- Action on Smoking and Health. *Smoking and disease. Basic facts No 2*. London: ASH, 2002. www.ash.org.uk (accessed 15 Dec 2003).
- Cromwell J, Bartosch WJ, Fiore MC, Hasselblad V, Baker T. Cost-effectiveness of the clinical practice recommendations in the AHCPR guideline for smoking cessation. *JAMA* 1997;278:1759-66.
- Nielsen K, Fiore MC. Cost-benefit analysis of sustained-release bupropion, nicotine patch, or both for smoking cessation. *Prev Med* 2000;30:209-16.
- Parrott S, Godfrey C, Raw M, West R, McNeill A. Guidance for commissioners on the cost effectiveness of smoking cessation interventions. *Thorax* 1998;53(suppl 5, part 2):S1-38.
- Stapleton JA, Lowin A, Russell MAH. Prescription of transdermal nicotine patches for smoking cessation in general practice: evaluation of cost-effectiveness. *Lancet* 1999;354:210-5.

Contact us | Search:

Go!

Main Menu

- Home
- Specialties
- International
- Regions
- The College
- Events
- Publications
- Venue

Publications Submenu

- **Publications**
- Clinical Medicine
- Print Publications
- Online Publications
- The Newsletter
- Memorabilia
- Order Forms

Online Publications : Working Party Reports

Nicotine Addiction in Britain

A report of the Tobacco Advisory Group of The Royal College of Physicians

ROYAL COLLEGE OF PHYSICIANS OF LONDON

[Contributors](#) | [Contents](#) | [Key Points](#)

(This report can be ordered from the Royal College of Physicians here)

Membership of the Tobacco Advisory Group of the Royal College of Physicians

John Britton (Chair)
Clive Bates
Kevin Channer
Linda Cuthbertson
Christine Godfrey
Martin Jarvis
Ann McNeill

Cover

photograph: Melanie Friend/Format

design: Merriton Sharp

Royal College of Physicians of London
11 St Andrews Place, London NW1 4LE

Registered Charity No. 210508

Copyright © 2000 Royal College of Physicians of London

ISBN 1 86016 1227

Contributors

David Balfour

Reader in Pharmacology and Neuroscience, Ninewells Hospital, Dundee

Clive Bates

Director, Action on Smoking and Health, London

Neal Benowitz

Professor of Medicine, Psychiatry and Biopharmaceutical Sciences, University of California, San Francisco, USA

Virginia Berridge

Professor of History, London School of Hygiene and Tropical Medicine

John Britton

Professor of Respiratory Medicine, City Hospital, Nottingham

Christine Callum

Statistician, Health Education Authority, London

Kevin Channer

Consultant Cardiologist, Royal Hallamshire Hospital, Sheffield

Linda Cuthbertson

Press and Public Relations Manager, Royal College of Physicians, London

Jonathan Foulds

Senior Lecturer in Clinical Psychology, University of Surrey

Christine Godfrey

Professor of Health Economics, University of York

Peter Hajek

Professor of Psychology, St Bartholomew's and the Royal London Hospital

Jack E Henningfield

Vice President, Research and Health Policy, Pinney Associates, Bethesda; Associate Professor of Behavioral Biology, Johns Hopkins University School of Medicine, Baltimore, USA

John R Hughes

Professor of Psychiatry, University of Vermont, USA

Martin Jarvis

Professor of Health Psychology, University College, London

Ann McNeill

Strategic Research Adviser, Health Education Authority, London

Lesley Owen

Senior Research Manager, Health Education Authority, London

Martin Raw

Honorary Senior Lecturer in Public Health, Guy's, King's and St Thomas's School of Medicine, London

Amanda Sandford

Research Manager, Action on Smoking and Health, London

John Slade

Professor of Environmental and Community Medicine, University of Medicine and Dentistry of New Jersey, USA

John Stapleton

Senior Lecturer, Institute of Psychiatry, London

Ian Stolerman

Professor of Behavioural Pharmacology, Institute of Psychiatry, London

Gay Sutherland

Honorary Consultant Clinical Psychologist, Institute of Psychiatry, London

David Sweanor

Senior Legal Counsel, Smoking and Health Action Foundation, Ottawa, Canada

Robert West

Professor of Psychology, St George's Hospital Medical School, London

Sue Wonnacott

Reader in Neuroscience, University of Bath

Foreword

In 1962, the Royal College of Physicians published its first report on the effects of smoking on health, drawing attention to the strong relationship between cigarette smoking and lung cancer. The report concluded that this association was probably causal, that smoking may also cause other diseases including chronic bronchitis and coronary heart disease, and that smokers may be addicted to nicotine.

In the years since that report was published, the true scale of the harm caused by smoking has become apparent. Smoking is now recognised as the single largest avoidable cause of premature death and disability in Britain and in most other economically developed countries, and probably the greatest avoidable threat to public health worldwide.

Public recognition of the health risks of smoking was probably one of the major factors underlying the progressive fall in smoking prevalence that occurred in Britain between the early 1960s and mid-1990s. However, recent data suggest that it is now beginning to stabilise in Britain at approximately one in four adults, whilst smoking in younger people is becoming more common. To achieve further marked reductions in smoking prevalence, it is therefore necessary to look in more detail at the factors that cause individuals to smoke, and to consider new methods of primary and secondary prevention.

This report addresses the fundamental role of nicotine addiction in smoking. It is now recognised that nicotine addiction is one of the major reasons why people continue to smoke cigarettes, and that cigarettes are in reality extremely effective and closely controlled nicotine delivery devices. Recognition of this central role of nicotine addiction is important because it has major implications for the way that smoking is managed by doctors and other health professionals, and for the way in which harmful nicotine delivery products such as cigarettes should be regulated and controlled in society. At a time when smoking still causes one in every five deaths in Britain, measures designed to achieve further reductions in smoking are clearly important and, if successful, will realise substantial public health benefits. It is time for nicotine addiction to become a major health priority in Britain. This report explains why.

February 2000 KGMM ALBERTI
President, Royal College of Physicians

Acknowledgements

The members of the Tobacco Advisory Group thank Lynn Koslowski for reviewing the manuscript, and Rachel Orme for editorial assistance.